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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/601,822	06/24/2003	Toru Iwamoto	1046.1294	9083
21171	7590	09/17/2007		
STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			EXAMINER SMITS, TALIVALDIS IVARS	
			ART UNIT 2626	PAPER NUMBER
			MAIL DATE 09/17/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/601,822	Applicant(s) IWAMOTO ET AL.	
	Examiner Talivaldis Ivars Smits	Art Unit 2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-12 and 14-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 19 is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-12, and 14-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. In response to the Office Action mailed 2/6/2007 applicant has submitted an Amendment, filed 7/19/2007 amending claims 1 and 10-18, canceling claims 4 and 13 without prejudice or disclaimer, adding new independent claim 19, and arguing for the allowability of the pending claims.

The amendment of claims 10-18 has overcome their rejection over 35 USC 101.

Response to Arguments

2. Applicant's arguments about claims 1-3, 5-12, and 14-18 have been fully considered but they are not persuasive.

Applicant argues concerning amended claim 1 that "Since Iwamida stores nonspeech sounds such as a fire engine's siren sound, a baby's crying, etc., as standard patterns, Iwamida is not 'specifying, as a characteristic of an ambient sound, a sound element that is not matched with the characteristic of the voice among the characteristic of the sound,' as recited in claim 1" (Amendment, p. 7), the limitation in question (emphasis supplied) having been added in the Amendment. This is applicant's only argument for the allowability of the claims.

The examiner disagrees. For, a fire engine siren's sound is not a "characteristic of the voice" that was input, but is an ambient sound. Also, since applicant has amended the recitation of the input "voice" to be "a voice for talking", the baby's cry also

"is not matched with the characteristic of the voice" doing the talking. In fact Iwamida *et al.* explicitly describe these as "nonspeech sounds" (col. 4, lines 19-21). Thus, *mutatis mutandis*, the examiner has retained these claim rejections, next.

As per newly-added claim 19, the examiner agrees that the prior art of record does not teach its limitations.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-3, 5-6, 9-12, 14-15, and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Iwamida (5,839,109).

As to claim 1, Iwamida teaches:

a sound input unit receiving an input of a voice for talking (fig. 2, element 11);

an analyzing unit obtaining a characteristic of the sound received by the sound input unit, by analyzing said sound (Fig. 2, element 22, frequency analyzer, col. 3, lines 45-55);

a control information storage unit storing therein a control information corresponding to the characteristic of the sound (storing display patterns and graphic

patterns to be displayed based on a matching speech features, col. 3, lines 60-67, and col. 4, lines 1-5, Fig. 2, elements 53 and 54);

a specifying unit specifying, as a characteristic of an ambient sound, a sound element that is not matched with the characteristic of the voice among the characteristic of the sound ("several kinds of nonspeech sounds, such as a fire engine's siren sound, a baby's crying, etc., are stored as standard patterns", col. 4, lines 17-24);

a retrieving unit retrieving from the control information storage unit, the control information corresponding to the characteristic of the ambient sound (a display controller for receiving the code representing the speech sound, the data representing information to be displayed, col. 4, lines 48-57, Fig. 2, element 61); an output unit outputting a predetermined effect (display controller, col. 4, lines 50-57); and

a control unit controlling the output unit based on the control information retrieved by the retrieving unit. (display device, Fig. 2, element 62).

As to claim 10, Iwamida teaches:

obtaining a characteristic of an inputted sound by analyzing the sound for talking (Fig. 2, element 22, frequency analyzer, col. 3, lines 45-55);

specifying, as a characteristic of an ambient sound, a sound element that is not matched with the characteristic of the voice among the characteristic of the sound ("several kinds of nonspeech sounds, such as a fire engine's siren sound, a baby's crying, etc., are stored as standard patterns", col. 4, lines 17-24);

retrieving from a control information storage unit, a control information corresponding to the characteristic of the ambient sound (retrieving from character display means or graphic pattern storage, codes to display the corresponding character or graphic pattern, col. 3, lines 60-67 and col. 4, lines 1-5, and col. 4, lines 50-58); and
executing the control so as to output a predetermined effect on the basis of the retrieved control information (a display device for outputting an graphic pattern or character pattern based on the retrieved code, col. 4, lines 47-58).

As to claims 2 and 11, Iwamida teaches the predetermined effect is at least one of operations performed based on predetermined functions such as displaying an image, reproducing a piece of music and giving a notice by vibrations. (displaying a graphic pattern, col. 4, lines 1-5).

As to claims 3 and 12, Iwamida teaches the characteristic of the sound is a power spectrum (using an FFT to analyze the signal, and obtain the power of each of the frequency bands, col. 3, lines 45-50).

As to claims 5 and 14, Iwamida teaches:

A detection unit detecting an auxiliary information to be used for the retrieve (detecting nonspeech to be used for the retrieving of data, Fig. 1, element 32); and
wherein the control information storage unit stores therein the sound characteristic, the auxiliary information and the control information in a way that

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corresponds the sound characteristic and the auxiliary information to the control information (the sound display information and the nonspeech display information are stored to be used by the comparing means, Fig. 1, elements 5, 51, 52 and 4), and

the retrieving unit retrieves from the control information storage unit, the control information corresponding to the sound characteristic and the auxiliary information (a display means retrieving the nonspeech sound display information and speech display information to display the correct information, Fig. 1, elements 6, 5, 51, and 52).

As to claims 6 and 15, Iwamida teaches a speaking state detection unit detecting, when the sound input unit receives the sound for a speech, a speaking period and a non-speaking period (determining speech or non-speech, col. 4, lines 58-67).

As to claims 9 and 18, Iwamida teaches receiving a sound during a non-using period of the computer (the system is constantly receiving non-speech sounds, col. 5, lines 29-45).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 7-8 and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwamida in view of Mittal et al. (US 6,823,312 B2).

Iwamida does not teach the sound input unit receives a sound transmitted from a device of the other party via a communication network, nor the sound input unit receives a sound transmitted to a device of the other party via the communication network.

However, Mittal et al. teach a phone system able to receive voices from either party transmitted over a communication system (Fig. 5, "phone").

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the methods of Iwamida with the communication network of Mittal et al. to provide a personalized system for providing a service for improving understandability of received speech in accordance with user specific needs, as taught by Mittal et al. (col. 3, lines 1-4).

Allowable Subject Matter

7. Claim 19 is allowed. The following is an examiner's statement of reasons for allowance: The prior art of record does not teach nor fairly suggest that a received sound input, consisting of speech and ambient noise which input is subsequently output without change, be supplemented at the output with a displayed image, wherein the displayed image corresponds to the best match of the ambient noise power spectrum to a set of predetermined model power spectra, each said power spectrum being associated with an image.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

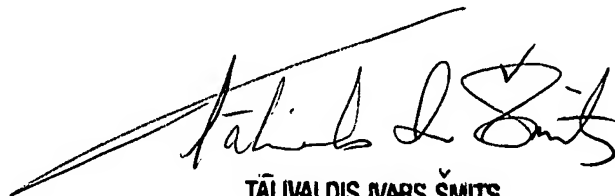
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Talivaldis Ivars Smits whose telephone number is 571-272-7628. The examiner can normally be reached on 8:30 a.m. to 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on 571-272-7602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

9/13/2007



TĀLIVALDIS NARS ŠMITS
PRIMARY EXAMINER